



## **Grand Portage Reservation**

### **Grand Portage Nonpoint Source Management Program: A Successful Program/Case Study**

**Brad Frazier, Director of Environmental Programs**

Presented at the Tribal Nonpoint Source  
Program Workshop, October 9-11, 2007

## **Grand Portage NPS Management Program**

**How do you create a  
successful NPS program?**

**Everybody wants to know!**



## Grand Portage NPS Management Program

- Obtain Eligibility
- Start getting base funding
- Teamwork required
- Need Cooperators
- Apply for competitive funding



## Grand Portage NPS Management Program

### Obtain Eligibility:

- Write NPS Assessment Report
- Write NPS Management Program
- Get TAS status for CWA Section 319
- Took about 4 years to achieve TAS in Jan 2005



## Grand Portage NPS Management Program

- Eligible for CWA Section 319 funding:
- Then eligible to apply for NPS base funds and write competitive funds proposals
- Thus far, GP has received 3 years base and 2 years of competitive funding



## Grand Portage NPS Management Program

### Apply for Base Funding

- 0.5 FTE NPS Coordinator
- Attend workshops/obtain training
- Work with cooperators and Tribal staff to prioritize and plan activities
- Manage other NPS projects (EPA and NRCS funded)
- Ensure construction projects utilize BMPs
- Outreach/education for community and Tribal officials



## Teamwork: Grand Portage Environmental Department

Amy Seitz, **NPS Coordinator**  
Margaret Watkins, **Water Quality**  
Stuart Oberg, **Air Quality**  
Andy Schmidt, **Wetlands**  
Victor Aubid, **Env. Technician**  
**Summer Staff, Previous Staff**



## Grand Portage NPS Management Program

### Cooperators

- Natural Resources Conservation Service (NRCS)**  
Paul Sandstrom  
Jessica Olson
- Association of Metropolitan Soil & Water Conservation Districts**  
Gregg Thompson



## Grand Portage NPS Management Program

### Cooperators (cont.)

- Grand Portage Construction Company

- Others

Local, state, tribal staff/officials,  
private consultants



## Grand Portage NPS Management Program

### Other Support

- Grand Portage Reservation Tribal Council
- Community support



## Grand Portage NPS Management Program

### Apply for Competitive Funding

- Grand Portage Reservation Watershed-Based Work Plan to Restore red Rock Creek (FY 2007)
- Grand Portage Reservation Watershed-Based Work Plan to Restore Grand Portage Bay (FY 2008)

### NRCS and Band Funding

- Grand Portage Lodge and Casino Rain Gardens Project



## Grand Portage NPS Management Program

### Important tips (secrets) for applying for Competitive Funding

Utilize data obtained with Section 106 funding to determine problem areas



Utilize your completed NPS Management Program to prioritize competitive projects





## Grand Portage NPS Management Program

### Important tips (secrets) for applying for Competitive Funding (cont.)

Justify importance of water resources in the proposal

Public water supply (Lake Superior)  
Recreation  
Subsistence  
Other

Follow Federal Register Exactly

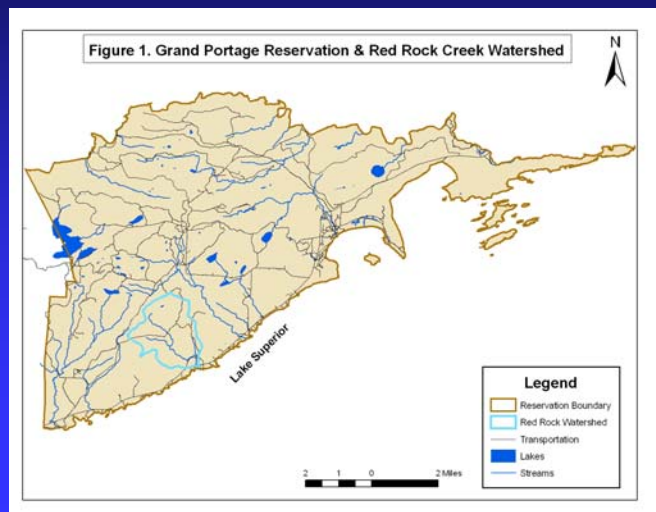
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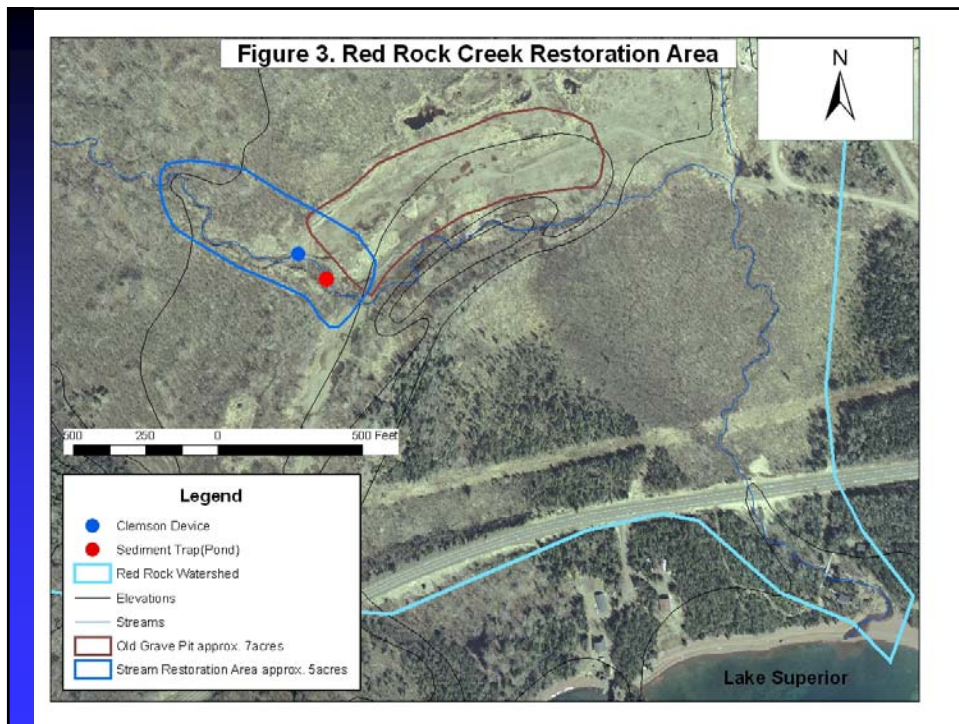


## Grand Portage NPS Management Program

### Example

Grand Portage Reservation Watershed-Based Work Plan to Restore Red Rock Creek (FY 2007)





## Grand Portage NPS Management Program

### I. Source Identification

- Abandoned gravel pit
- Beaver activity/dam failure
- High sediment loading





## Grand Portage NPS Management Program

### II. NPS Management Measures (outputs)

- Grading and re-vegetating gravel pit
- In-stream sediment trap
- Vegetate riparian corridor
- Reduce beaver activity



## Grand Portage NPS Management Program

### III. Water Quality Based Goals (outcomes)

- Turbidity ↓
- D.O. ↑
- Macroinvertebrate diversity/numbers ↑
- Fish habitat ↑



## Grand Portage NPS Management Program

Comparison of two upper reaches of stream for D.O. and temperature

	2000		2006	
	Mean D.O. mg/L	Mean Temp.	Mean D.O. mg/L	Mean Temp.
Red Rock Gravel Pit	8.40	13.93	8.36	14.19
Upper Hollow Rock (reference site)	9.87	11.05	10.55	11.09

## Grand Portage NPS Management Program

Macroinvertebrate results for Red Rock and Hollow Rock Creeks below Highway 61

Site	2000		2006	
	%POET*	% Diptera (true flies)	%POET	% Diptera (true flies)
Red Rock	37%	30%	20%	23%
Hollow Rock (Reference Site)	95%	3%	93%	1%

\* POET = Stonefly, Dragonfly, Mayfly, Caddisfly

## Grand Portage NPS Management Program

### IV. Technical Assistance

- NRCS (Engineering/plans)
- GP Construction (sediment trap/grading)
- Contractors (plantings)
- GP Biology dept. (beaver control)



## Grand Portage NPS Management Program

### V. Education Component

- Community outreach/education
  - Articles in newspaper
  - Advertise assistance to community
  - Posters and handouts at community events



## Grand Portage NPS Management Program

### VI. Activity Implementation Schedule

-Briefly re-list work plan commitments  
in a table

Activity	Start	End
Construct sediment control pool	July 1, 2007	August 1, 2007
⋮	⋮	⋮

## Grand Portage NPS Management Program

### VII. Milestones

-Document progress as each activity  
is completed  
-Take lots of photos



## Grand Portage NPS Management Program

### VIII. Water Quality Criteria Goals (outcomes)

- Turbidity ↓ 50%
- D.O. ↑ 2 mg/L
- Macroinvertebrate diversity/numbers ↑  
%POET ~ 90%



## Grand Portage NPS Management Program

### IX. Monitoring Component

- Continue monitoring with Section 106  
and Band funds





## Grand Portage NPS Management Program

### Summary

- Obtain Eligibility
- Start getting base funding
- Teamwork required
- Need Cooperators
- Tribal Council/Community support

## Grand Portage NPS Management Program

### Summary

- Remember when applying for competitive funding
  - Follow federal Register
  - Justify importance of water resources
  - Utilize your completed NPS management program to prioritize projects
  - Utilize data obtained with Section 106 funds

## **Grand Portage NPS Management Program**

**The End**

**Questions?**